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COMMUNITY FOR DATA INTEGRATION

CLIMATE AND LAND USE CHANGE • WATER • CORE SCIENCE SYSTEMS • ECOSYSTEMS • ENERGY AND MINERALS • NATURAL HAZARDS • ENVIRONMENTAL HEALTH

myScience: Citizen Science Project Discovery & Public Engagement Web Application

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U.S. Department of the Interior
U.S. Geological Survey

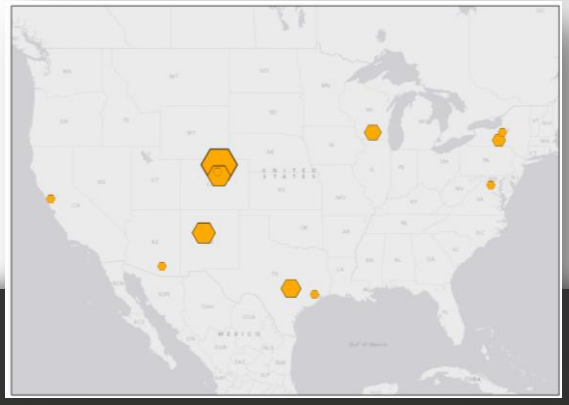
CDI Webinar Series 2013

Outline

- Background
- Project
- Progress Report
- Future Work

Background

- **Barbara Poore Spreadsheet**
- **CDI Citizen Science Working Group (CSWG)**
  - **Citizen Science Project Inventory**
- **Core Science Analytics & Synthesis (CSAS)**
  - ***Citizen Science Cyber-infrastructure***



USGS
science for a changing world

The Current Landscape of Public Participation in USGS Science

Introduction

About the CDI Citizen Science Working Group

Water

Natural Hazards

Biology and Ecosystems

Invasive Species

Mapping and GIS

Summary

References

Citizen Science Project Inventory

- Project metadata
- Find speakers, insight, collaboration
- Share with other USGS Offices
- Respond to RFIs
- Provide content to posters, handouts
- Internal and external value

USGS Scientists

Citizen Science Project Inventory

People use inventory content for products, RFIs

Projects = Cooperative Partnerships

Acadia National Park,

Cuyahoga Valley National Park, Indiana Dunes National Lakeshore,

Pictured Rocks National Lakeshore,

Pt. Reyes National Seashore, Sleeping Bear Dunes National Lakeshore,

Voyaguers National Park, Universities in Turkey and the Czech Republic,

Portland State University, Clean Water Services,

Hawaii Geographic Information Coordinating Council,

Maui Economic Development Board,

Women In Technology (WIT), Hawaii's Natural Resources & Invasive Species Committee, Bishop Museum, American Museum of Natural History, Center for Biodiversity and Conservation,

Appalachian Mountain Club (AMC),

New York - North Jersey Young Members,

New York Entomological Society,

Proteus Gowanus Interdisciplinary Gallery and Reading Room,

Discover Life,

Canadian Wildlife Service, National Wildlife Research Center,

Geophysical Institute of the University of Alaska Fairbanks (UAFGI),

State of Alaska Division of Geological and Geophysical Surveys (ADGGS),

B. Thomas Golisano College of Computing & Information Sciences - Rochester Institute of Technology,

Division of Geological and Planetary Sciences – Cal Tech,

US Fish and Wildlife Service, NatureServe,

NOAA,

Great Lakes Environmental Research Laboratory,

Aquatic Nuisance Species Task Force,

Habitattitude,

EDDMapS,

Smithsonian Environmental Research Center,

USDA,

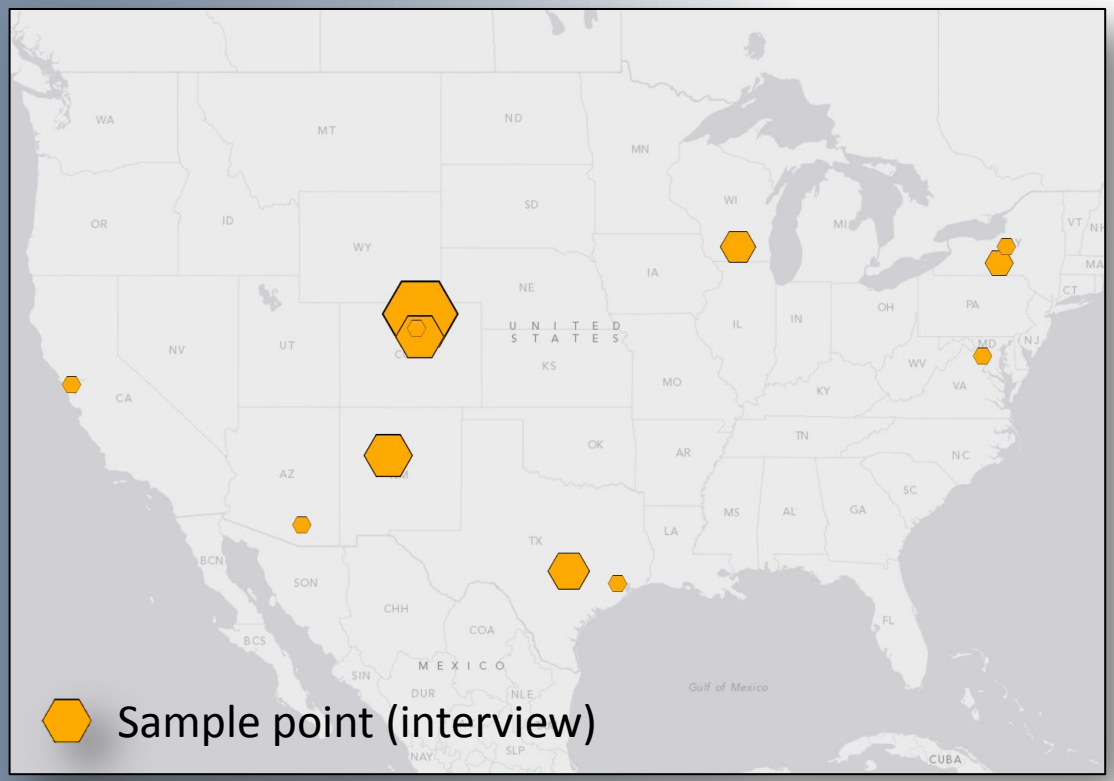
Protect Your Waters,

Stop Aquatic Hitchhikers! campaign, Reef Environmental Education Foundation,

iMapInvasives,

...and many more!

Citizen Science Cyber-infrastructure Research

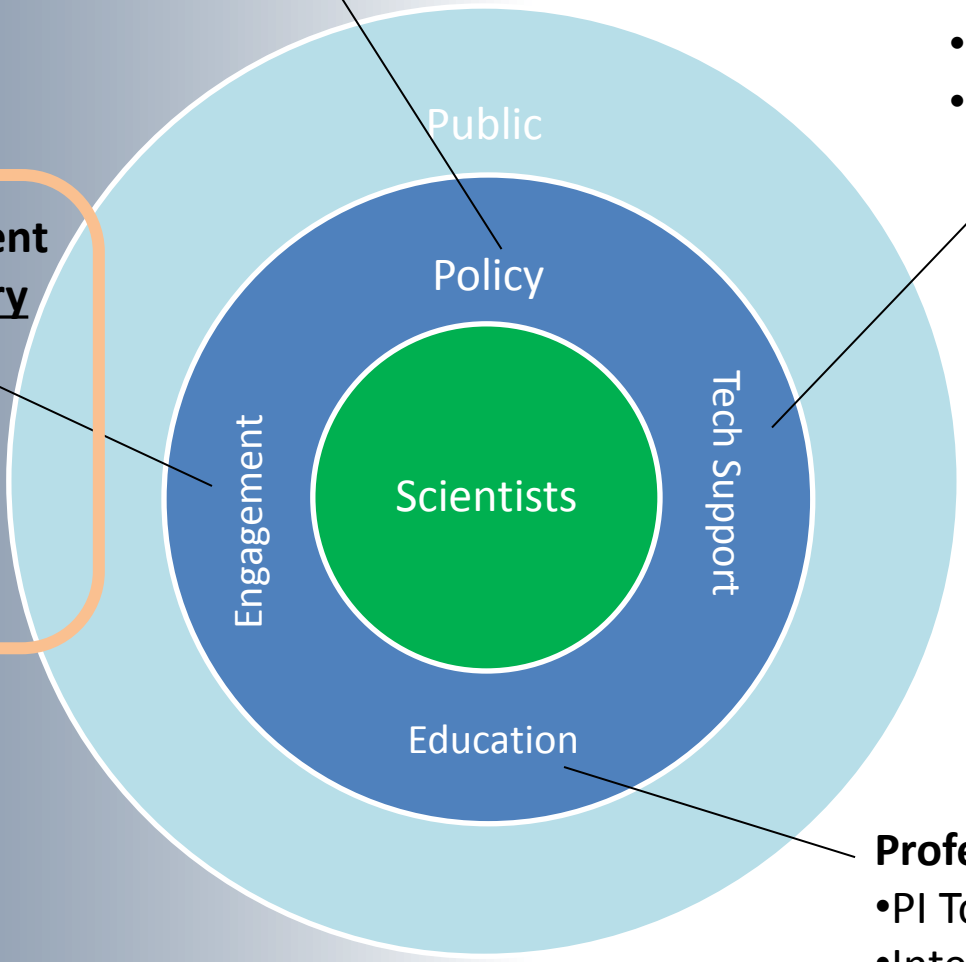


- How are citizen science projects conducted at USGS now?
- What are the cyber-infrastructure requirements of USGS scientists to engage the public in research?
- https://my.usgs.gov/confluence/display/aesir/myScience

Policy
•DOI and Federal policies need to be addressed or created

Tech Support
•Data Storage and Access
•ScienceBase
•Choice of platforms
•Choice of methods
•Open ID access

Public Engagement
•<u>**Project discovery**</u>
•Services
•Social support
•Intra-agency communication (address silos)



Professional Development
•PI Toolkit
•Intentional Design
•Perception & Proven results

USGS Citizen Science Cyber-infrastructure Requirements

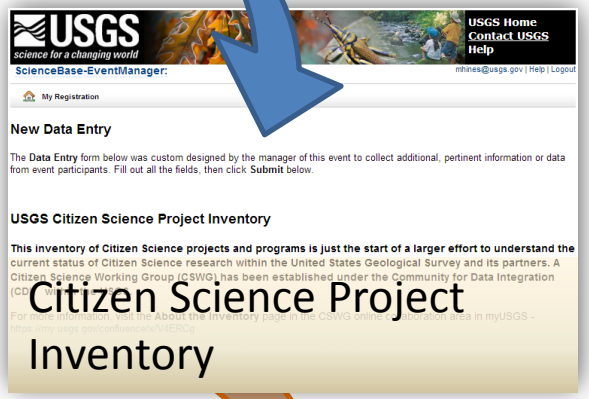
myScience: Citizen Science Project Discovery & Public Engagement Web Application

- How may the public discover opportunities for participation in USGS scientific research?
- What citizen science projects with USGS involvement are currently active?
- How may project leads increase public engagement in and awareness of their citizen science projects?

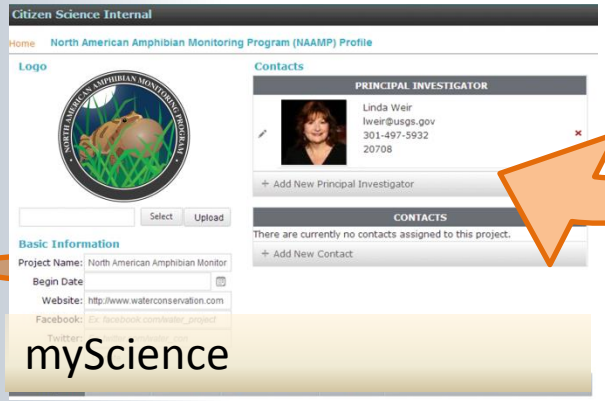
mySCience: Closes the loop

Public participants

USGS Scientists



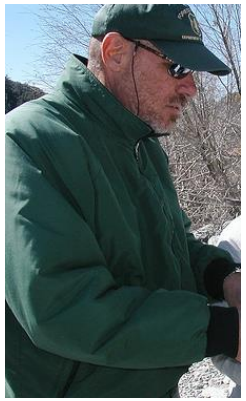
Citizen Science Project Inventory



mySCience

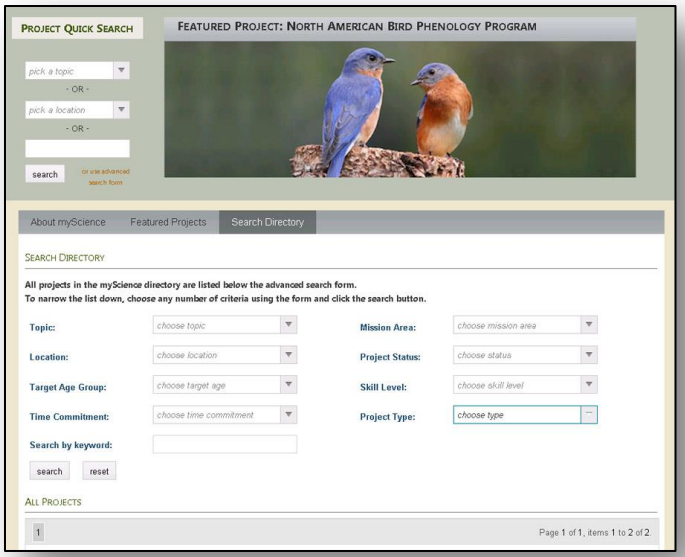
myScience: Content & Audience

- 22 projects in the original inventory
  - At least one contact within USGS
- Citizen Science Internal Audience
  - USGS scientists who are engaging or who would like to engage the public in their research
  - The person who registers a project may be different from the project lead because projects are highly collaborative
- Public Web Presence Audience
  - Any person who wants to find out how to become involved with a citizen science project in which the USGS has a role



myScience: Products

- Citizen Science Internal
- Public Web Presence
- Database
- Web Services
- Fact Sheet



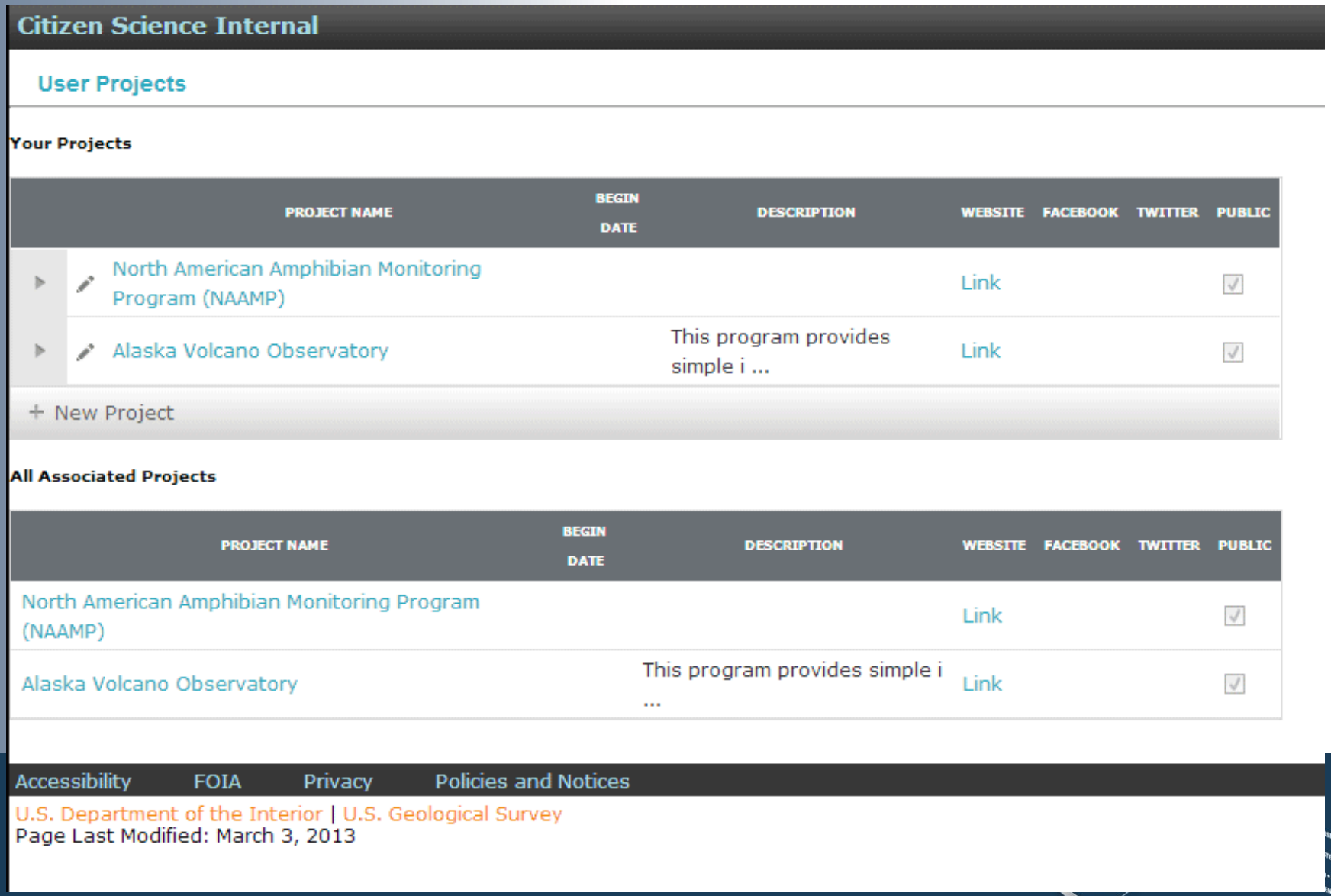
Begin date: 6/10/13

Completion date: 9/30/13

Citizen Science Internal (USGS)

- Enter and edit project metadata
- No login required – uses Active Directory
- Easy creation of new projects
- Assign edit access to other users
- Internal project profile view
- Basic + detailed information
  - Monitoring protocols, spatial extent, partners
- Community of practice

Citizen Science Internal



Citizen Science Internal Project Page

Citizen Science Internal

Home North American Amphibian Monitoring Program (NAAMP) Profile

Select Upload

Basic Information

Project Name: North American Amphibian Monitor

Begin Date

Website: http://www.waterconservation.com

Facebook: Ex: facebook.com/water_project

Twitter: Ex: twitter.com/water_con

Contacts

PRINCIPAL INVESTIGATOR

Linda Weir
lweir@usgs.gov
301-497-5932
20708

+ Add New Principal Investigator

CONTACTS

Linda Carter
lcarter@waterconservation.com
512-927-3500
78754

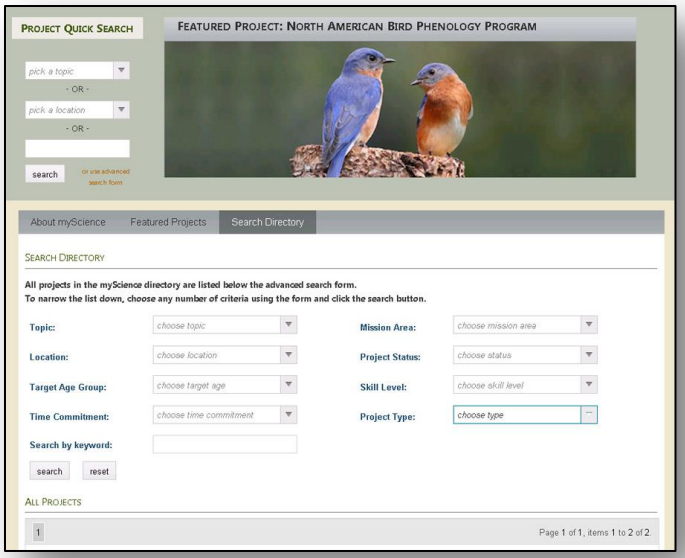
+ Add New Contact

Description | Location | Audience | Data & Protocol | Partners | Additional Resources

Description

Public Web Presence

- Featured Projects
- Quick Search
  - Key word
  - Location
  - Text entry
- Advanced search
- Project Detail Pages



Search Directory

PROJECT QUICK SEARCH

pick a topic

- OR -

pick a location

- OR -

search

or use advanced search form

FEATURED PROJECT: NORTH AMERICAN BIRD PHENOLOGY PROGRAM

About myScience | Featured Projects | Search Directory

SEARCH DIRECTORY

All projects in the myScience directory are listed below the advanced search form.
To narrow the list down, choose any number of criteria using the form and click the search button.

Topic:	choose topic	**Mission Area:**	choose mission area
Location:	choose location	**Project Status:**	choose status
Target Age Group:	choose target age	**Skill Level:**	choose skill level
Time Commitment:	choose time commitment	**Project Type:**	choose type
Search by keyword:			

search reset

ALL PROJECTS

1

Page 1 of 1, items 1 to 2 of 2.

Project Details

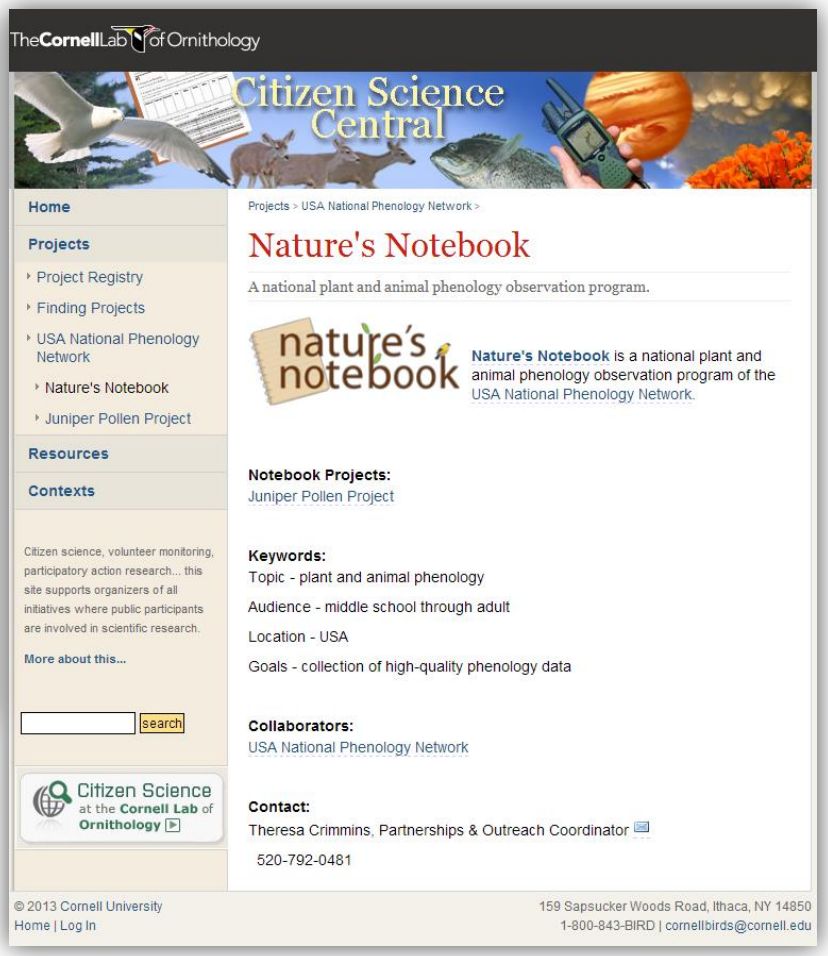
ALASKA VOLCANO OBSERVATORY

This program provides simple instructions on how to take a variety of observations about volcanic ash in Alaska: thickness measurements, measured-area sampling, time incremental sampling, bulk sampling. It gives people the choice to report what they feel able to do. It is not yet available online. These samples help USGS understand the composition, volume, and dispersal pattern of the ash. The area over which ash can fall is large, and ash-fall deposits can be ephemeral. Timely access is often difficult for us. Locals are ideally positioned to collect excellent samples. These instructions describe how to collect a sample of volcanic ash from a recent or ongoing volcanic eruption. We would like two types of samples if possible: (1) measured-area samples and, (2) bulk ash samples. Detailed methods and an information sheet (datasheet) are provided below or as links within the text. (text from OSTP summary and website: http://www.avo.alaska.edu/ashfall.php)

Basic Details | Target Audience | Project Contacts | Additional Resources | Join Now!

Location:	*unknown*	**Status:**	*unknown*	**Start Date:**	
Website:	http://www.avo.alaska.edu/ashfall/ashreport.php				
Facebook:					
Twitter:					
USGS Topic Keywords:	observation, volcanic ash, volcanoes	**Project Type:**	*unknown*	**Focal Species**	*n/a*
External Partners:	Geophysical Institute of the University of Alaska Fairbanks (UAFGI), State of Alaska Division of Geological and Geophysical Surveys (ADGGS)				

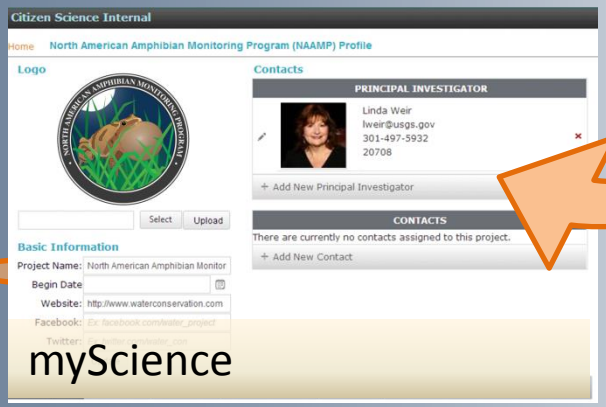
Facilitate Information Sharing



Web services: Opens the loop

USGS Scientists

Citizen Science Project Inventory



myScience

Other Project Inventories

Future work

- Testing
- Proximity search
- Enhancements
- Continue collaboration with partners
  - Web service development
- Integration with ScienceBase

Questions?

- **Contact**
  - **Sally Holl: sholl@usgs.gov**
  - **Megan Hines: mhines@usgs.gov**
- ***Do you have a project for the inventory?***
- ***Would you like to be a myScience tester?***

...E-mail us!